

REMARKS

Below, the applicant's comments are preceded by related remarks of the examiner set forth in small bold type.

Claims 1-4, 6-7, 13-14, 16-19, 21, 26-28, 30-31, 34-38, 41-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over Adiletta PN 6,606,704, in view of Patkar et al PN 6,643,726. Per claims 1, Adiletta teaches a method comprising: identifying memory resources for pushing data to a processing agent; arbitrating use of a push bus by using an arbiter [Fx-cmd bus arbiter, fig. 6-1; col. 3, lines 50-60]; and pushing the data from the memory resources to the processing agent through the push bus, the memory resources obtaining access to the push bus based on arbitration by the bus arbiter [fig. 6-1, 6-2, 6-4; col. 19, lines 42-65; col. 20, lines 1-20] Adiletta does not teach a push bus arbiter using for bus arbitration scheme.

Patkar teaches push bus arbiter [col. 3, lines 25-45]. It would have been obvious to one having ordinary skill in the art at the time the invention was made to further include the push bus arbiter into Adiletta system. By merely having a dedicate push bus arbiter for the push microengines for handling their own arbitration in a distributed manner, this dedicate arbitration scheme thus eliminates contention for memory as well as contention for a single central arbitrator. This further increase system reliability due to dual arbiter capability [e.g., push bus arbiter for push microengines, and pull bus for pull microengines] so bus arbitration can be processed over two independent data paths, enhancing speed and reliability.

The applicant respectfully disagrees. As the applicant's representative explained in a telephone interview on October 4, 2004, Patkar does not disclose or suggest "identifying memory resources for pushing data to a processing agent," and "memory resources obtaining access to the push bus based on arbitration by the push bus arbiter." The applicant notes that, by using the plural form "memory resources," claim 1 requires that there are more than one memory resource that obtain access to a push bus on based on arbitration by a push bus arbiter.

Adiletta discloses a memory system 16 that includes an SDRAM memory 16a, an SDRAM controller 26a, a DRAM memory 16b, and a DRAM controller 26b. Six microengines 22a-22f access either the SDRAM 16a or SRAM 16b based on characteristics of the data. Adiletta gives an example in which the SRAM controller controls arbitration for the SRAM bus, accesses the SRAM 16b, fetches the data from the SRAM 16b, and returns data to a requesting microengine. (See col. 3, lines 32-58.) Adiletta discloses one SRAM memory that can be

accessed through the SRAM bus based on arbitration. Adiletta does not disclose or suggest "memory resources obtaining access to the push bus based on arbitration by the push bus arbiter," which requires more than one memory resource, in which the memory resources obtain access to the push bus based on arbitration.

What is lacking in Adiletta is also not disclosed or suggested by Patkar. While Patkar discloses bus arbitrators 32, 34, 36, and 38, the arbitrators arbitrate access to one DRAM 42. Patkar does not disclose or suggest "memory resources obtaining access to the push bus based on arbitration by the push bus arbiter."

Claims 13, 26, 30, 36, and 42 are patentable for at least similar reasons as claim 1.

The applicant thanks the examiner for indicating allowance of claims 32 and 39 if rewritten in independent form. The other dependent claims are patentable for at least the same reasons as the claims on which they depend.

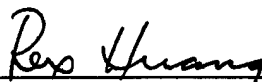
Any circumstance that the applicant has addressed certain comments of the examiner does not mean that the applicant concedes other comments of the examiner. Any circumstance that the applicant made arguments for the patentability of some claims does not mean that there are not other good reasons for patentability of those claims and other claims.

Please apply \$110 for the Petition for Extension of Time, and any charges to deposit account 06-1050, referencing attorney docket 10559-618001.

Respectfully submitted,

Date: _____

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** See attached document certifying that Rex Huang has limited recognition to practice before the U.S. Patent and Trademark Office under 37 CFR § 10.9(b).*